

14. (Presently amended) A method of operating an electric motor having a microprocessor that controls ~~its~~ commutation of the motor, said microprocessor having associated therewith a volatile memory and a nonvolatile memory, comprising the steps of:

B1 upon switch-on of the motor, loading an old operating data value from the nonvolatile memory into the volatile memory associated with the microprocessor, and saving the operating data value there as a variable;

updating the value of the variable in the volatile memory at substantially predetermined points in time; and

replacing, at predetermined substantially regular intervals, said operating data value stored in the nonvolatile memory by a current value of said variable from said volatile memory.

15. (Original) The method according to claim 14, further comprising

performing said step of updating the value of the variable in the volatile memory during time intervals between commutation operations.

16. (Original) The method according to claim 14, further comprising

performing said loading of said operating data value from said nonvolatile memory into said volatile memory each time a reset of said microprocessor is performed.

17. (Original) The method according to claim 14, further comprising,

as part of a reset operation, transferring the present value of the variable as the old operating data value into the nonvolatile memory (74).

18. (Original) The method according to claim 14, further comprising the step of

polling the operating data value saved in the nonvolatile memory via a data connection.

19. (Original) The method according to claim 18, further comprising

performing said polling of the operating data under control by said microprocessor.

20. (Original) The method according to claim 14, wherein a temperature sensor is associated with the motor; and further comprising the step of

saving an extreme value (OD_TM) of the temperature (T) sensed by said temperature sensor as an operating data value (FIG. 8: OD_TMAX) in the nonvolatile memory.

21. (Original) The method according to claim 14, wherein the motor (32) comprises an A/D converter which converts an analog voltage into a digital value; and further comprising the step of

saving, as an operating data value in the nonvolatile memory, an extreme value (OD_UBM) of the voltage converted by said A/D converter.

22. (Original) The method according to claim 14, further comprising

saving a value (OD_COMM) corresponding to the number of commutations as an operating data value in the nonvolatile memory.

23. (Original) The method according to claim 14, further comprising

saving, in the nonvolatile memory, a duration of operation (OD_OH) of the motor as an operating data value.

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24. (Original) The method according to claim 14, further comprising, upon switch-on of the motor,

loading a plurality of operating data values from the nonvolatile memory into respective variables in the volatile memory, and

subsequently updating values of said variables, under control by said microprocessor.

25. (Presently Amended) An electric motor comprising a microprocessor ~~which controls~~ for controlling commutation of the motor,

a nonvolatile memory adapted to store motor operating data while said motor is off, and a volatile memory adapted to store motor operating data during operation of said motor, and

means, responsive to switch-on of said motor, for transferring said motor operating data from said nonvolatile memory to said volatile memory; and

means for replacing, at substantially regular intervals, motor operating data stored in the nonvolatile memory by current motor operating data stored in said volatile memory.

26. (Original) The electric motor according to claim 25, further comprising a data bus (82) connected between said motor and an interface (80) provided on said motor for enabling data traffic between an external device (87) connected to said interface, and said motor.

27. (Original) The electric motor according to claim 26, wherein said data bus is a bidirectional data bus.

31 28. (Original) The electric motor according to claim 26, wherein said data bus is an inter-integrated-circuit (I²C) bus.

29. (Presently Amended) An electronically commutated motor (ECM) comprising
a microprocessor which controls commutation of the motor,
a nonvolatile memory adapted to store motor operating data while said motor is off, and
a volatile memory adapted to store motor operating data during operation of said motor;

wherein the microprocessor, during operation of the motor, controls writing operations for periodically writing motor operating data from said volatile memory into said nonvolatile memory.

30. (Original) The motor of claim 29, wherein said nonvolatile memory is an electrically erasable programmable read only memory (EEPROM) and said volatile memory is a random access memory (RAM).